

CLAIMS

What is claimed is:

- 1 1. A pointer instrument, comprising:
2 a printed circuit board;
3 first and second instrument mechanisms independently arranged on said
4 printed circuit board such that the printed circuit board is between the first and second
5 instrument mechanisms; and
6 first and second pointers having concentric pivoting axes, wherein said
7 first instrument mechanism acts on said first pointer and said second instrument
8 mechanism acts on said second pointer, said first and second instrument mechanisms
9 having essentially concentric rotational axes.
- 1 2. The pointer instrument of claim 1, wherein said second instrument
2 mechanism is arranged below said printed circuit board with respect to said first and
3 second pointers and said first instrument is arranged above said printed circuit board
4 with respect to said first and second pointers, said first instrument mechanism
5 comprising a hollow shaft connecting said first instrument mechanism to said first
6 pointer, and said second mechanism comprising a shaft connecting said second
7 instrument mechanism to said second pointer, wherein said shaft of said second
8 instrument mechanism passes through said printed circuit board and through said
9 hollow shaft of said first instrument mechanism.

1 3. The pointer instrument of claim 2, further comprising an optical fiber
2 between said hollow shaft of said first instrument mechanism and said shaft of said
3 second instrument mechanism which extends through said hollow shaft, said optical
4 fiber being arranged to illuminate second pointer.

1 4. The pointer instrument of claim 1, wherein said second instrument
2 mechanism is arranged below said printed circuit board with respect to said first and
3 second pointers and said first instrument is arranged above said printed circuit board
4 with respect to said first and second pointers, said second instrument mechanism
5 comprising a bracket connecting said second instrument mechanism to said second
6 pointer, said bracket projecting through a cutout in said printed circuit board, said cutout
7 being arc-shaped and located essentially concentrically with respect to the pivoting axis
8 of said second pointer.

1 5. The pointer instrument of claim 4, further comprising an optical
2 fiber, wherein said bracket passes through said optical fiber.

1 6. The pointer instrument of claim 4, wherein said cutout through
2 which said bracket projects defines a path which extends along an arc that is a
3 maximum of 90°.

1 7. The pointer instrument of claim 4, wherein said second pointer
2 comprises an area of said bracket which points radially inwards with respect to the
3 pivoting axes of said first and second pointers and is above said printed circuit board.

1 8. The pointer instrument of claim 4, further comprising a hollow shaft
2 element connecting said bracket to said second pointer, and a shaft connecting said
3 first pointer to said first instrument mechanism, said shaft passing through said hollow
4 shaft.

1 9. The pointer instrument of claim 4, wherein said bracket is a light
2 guide element.

1 10. The pointer instrument of claim 4, further comprising a light guide
2 element arranged on said bracket.

1 11. An instrument panel comprising a printed circuit board and at least
2 two pointer instruments arranged on said printed circuit board, said at least two pointer
3 instruments having pointer pivoting axes which are essentially parallel to one another,
4 wherein at least one of said at least two pointer instruments comprises first and second
5 instrument mechanisms independently arranged on said printed circuit board such that
6 the printed circuit board is between the first and second instrument mechanisms, and
7 first and second pointers having concentric pivoting axes, wherein said first instrument
8 mechanism acts on said first pointer and said second instrument mechanism acts on
9 said second pointer, said first and second instrument mechanisms having essentially
10 concentric rotational axes.

1 12. The instrument panel as claimed in claim 11, wherein at least one
2 pointer instrument of said at least two pointer instruments has an only one pointer and

- 3 instrument mechanism, wherein one pointer and instrument mechanisms of said at least
- 4 one pointer instrument are arranged above said printed circuit board.